<u>Abstract</u>

The present invention provides for power amplifier control of amplifier circuitry including an input stage and one or more output stages. The input stage is powered separately from the output stage by a relatively fixed power source. The one or more output stages are supplied with power via a voltage regulator having a controllable output voltage. A closed loop control integrated with the amplifier stages forces the voltage output of the voltage regulator to track the profile of an adjustable control signal, such as V_{RAMP} .